

### STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0114740; AI 87128; PER20060001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I. THE APPLICANT IS:** Town of Leonville  
Leonville Wastewater Treatment Facility  
P.O. Box 57  
Leonville, LA 70551
- II. PREPARED BY:** Jim Bondy
- DATE PREPARED:** February 14, 2007
- III. PERMIT ACTION:** reissue LPDES permit LA0114740, AI 87128; PER20060001

LPDES application received: April 5, 2006

LPDES permit effective date: November 1, 2001

LPDES permit expiration date: October 31, 2006

**IV. FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Leonville.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located on Hwy 740 (Oscar Rivette Road) at the end of Garland Lane in Leonville, St. Landry Parish.
- D. The treatment facility consists of a bar screen, grit removal, Biolac aeration basin, and Biolac clarifiers. Disinfection is by ultraviolet light.
- E. Outfall 001

Discharge Location: Latitude 30° 28' 7" North  
Longitude 91° 57' 58" West

Description: treated sanitary wastewater

Design Capacity: 0.20 MGD

Type of Flow Measurement which the facility is currently using:

ultrasonic totalizing meter w/ continuous chart recorder

## Statement of Basis

LA0114740; AI 87128; PER20060001

Page 2

**V. RECEIVING WATERS:**

The discharge is into an unnamed ditch; thence into Bayou Teche in segment 060301 of the Vermilion - Teche Basin.

The designated uses and degree of support for Segment 060301 of the Vermilion - Teche Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Partial	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Not Supported	Full	Not Supported	N/A	N/A	N/A	N/A

<sup>1/</sup>The designated uses and degree of support for Segment 060301 of the Vermilion - Teche Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 060301 of the Vermilion - Teche Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

## Statement of Basis

LA0114740; AI 87128; PER20060001

Page 3

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Jim Bondy  
 Water Permits Division  
 Department of Environmental Quality  
 Office of Environmental Services  
 P. O. Box 4313  
 Baton Rouge, Louisiana 70821-4313

## IX.

**PROPOSED PERMIT LIMITS:**

Subsegment 060301 of the Vermilion - Teche River Basin is not listed on LDEQ's Final 2004 303(d) list of impaired waterbodies. However, subsegment 060301 was previously listed as impaired for suspended solids/turbidity/siltation, organic enrichment/low DO, nutrients, phosphorus, pathogen indicators, sulfates, salinity/TDS, chlorides, and carbofuran for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

As per the October 2000 LA TMDL Delist (Federal Register Notice: Vol 66, pages 18087-18089, 4/5/2001), assessment of new data and information shows this segment is meeting water quality standards for turbidity. Therefore, requirements for turbidity will not be placed in this permit.

*The TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed* was final on May 3, 2001. As per this TMDL, "Point sources do not represent a significant source of TSS as defined in the TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors and discharges of organic suspended solids from point sources are already addressed by LDEQ through their permitting of point sources to maintain water quality standards for DO, the wasteload allocations for point source contributions were set to zero. This TMDL only addresses the landform contribution of TSS/sediment and does not address the insignificant point source contributions." Therefore, TSS limits will remain as previously permitted.

*The Bayou Teche Watershed TMDL for Dissolved Oxygen including WLAS for Twenty-two Facilities and Addressing Nutrients* was final on December 1, 1999 and revised on January 5, 2000, and then on November 30, 2005 the *Addendum to the 2000 Bayou Teche TMDL for Biochemical Oxygen-Demanding Substances* was added to include six new dischargers to subsegments 060301 and 060401. A specific wasteload allocation was assigned to the Town of Leonville. The wasteload allocation will require no change from the previous permit for CBOD<sub>5</sub>. However, there will be a summer season (May – October) limit for Ammonia-Nitrogen, whereas the previous permit required only monitoring and reporting for Ammonia-Nitrogen. The TMDL also states that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. Therefore, the impairments of nutrients and phosphorus are addressed by this TMDL.

## Statement of Basis

LA0114740; AI 87128; PER20060001

Page 4

The *Bayou Teche TMDL for Fecal Coliform* was final on January 19, 2001. As per the TMDL, "The Louisiana Water Quality Regulations require permitted point source discharges of treated sanitary wastewater to maintain a fecal coliform count of 200 cfu/100ml in their effluent, i.e., they must meet the standard at end-of-pipe. Therefore, there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." Fecal Coliform effluent limitations will remain as previously permitted.

The *Bayou Teche TMDL for Sulfate - Subsegment 060301*, finalized on March 13, 2001, established monthly average load limitations for all significant point source dischargers in this subsegment. However, due to a change in the standards for sulfate as per 9/20/03 Rule, it was determined that this subsegment was in compliance with the new sulfate standard. Therefore, the basis for the TMDL was dissolved and a limitation for sulfate will not be placed in the permit.

According to the *Bayou Teche TMDL for Chloride - Subsegment 060301*, finalized on March 13, 2001, "The observed (calculated) load was less than the allowable load and therefore no reduction in load is required by point source dischargers. However, no increase in load will be allowed until additional data clearly demonstrate that the criterion is not being exceeded in greater than 30% of the measurements." As per 9/20/03 Rule, the standard for chloride in this subsegment was changed, therefore dissolving the basis for the TMDL.

The *Bayou Teche TMDL for Salinity/Total Dissolved Solids - Subsegment 060301*, finalized on May 3, 2001, established monthly average load limitations for all significant point source dischargers in this subsegment. However, due to a change in the standards for salinity/tds as per 9/20/03 Rule, it was determined that this subsegment was in compliance with the new standard. Therefore, the basis for the TMDL was dissolved and a limitation for TDS will not be placed in the permit.

The *TMDL for the Pesticide Carbofuran in the Mermentau and Vermilion - Teche River Basins* was final on March 1, 2002. There are no known point source discharges of Carbofuran in the Mermentau Basin, and therefore no allocation was given to point sources. There is one point source in the Vermilion - Teche (FMC Corp. LA0064360) but they do not discharge Carbofuran. Likewise no allocation was given to point source discharges in the Vermilion-Teche Basin.

## Statement of Basis

LA0114740; AI 87128; PER20060001

Page 5

**Final Effluent Limits:****OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD <sub>5</sub>	16.68	10 mg/l	15 mg/l	Limits are set in accordance with the <i>Addendum to the 2000 Bayou Teche TMDL for Biochemical Oxygen-Demanding Substances</i> .
TSS	25	15 mg/l	23 mg/l	Limits are set in accordance with the <i>TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed</i> and the previous permit.
Ammonia-Nitrogen May - October November - April	16.68 N/A	10 mg/l N/A	20 mg/l N/A	Limits are set in accordance with the <i>Addendum to the 2000 Bayou Teche TMDL for Biochemical Oxygen-Demanding Substances</i> .

**Other Effluent Limitations:****1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

## Statement of Basis

LA0114740; AI 87128; PER20060001

Page 6

**X. PREVIOUS PERMITS:**

LPDES Permit No. LA0114740: Effective Date: November 1, 2001

Expiration Date: October 31, 2006

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD <sub>5</sub>	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Ammonia-Nitrogen	report	report	2/month	Grab
DO	report	report	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

The permit contains pollution prevention language.

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

A review of the files indicates that there have been no recent inspections performed at this facility.

**B) Compliance and/or Administrative Orders**

A review of the files indicates that there are no recent enforcement actions administered against this facility:

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning January 1, 2005 through September 30, 2006 has revealed the following violations:

<u>Month*</u>	<u>Parameter</u>	<u>Permit Limit</u>	<u>DMR Reported Value</u>
February 2005	TSS, Monthly Avg.	15 mg/l	20 mg/l
	TSS, Weekly Avg.	23 mg/l	26 mg/l

\*DMRs from January 2006 through June 2006 could not be located in the main file.

**XII. ADDITIONAL INFORMATION:**

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.20 MGD.

## Statement of Basis

LA0114740; AI 87128; PER20060001

Page 7

Effluent loadings are calculated using the following example:

$$\text{CBOD}_5: 8.34 \text{ lb/gal} \times 0.20 \text{ MGD} \times 10 \text{ mg/l} = 16.68 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between **0.10** and **0.50** MGD.

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
CBOD <sub>5</sub>	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

**Pretreatment Requirements**

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

**XIII      TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a reissue permit for the discharge described in this Statement of Basis.

**XIV      REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Leonville, Leonville Wastewater Treatment Facility, April 5, 2006.